

Cryptosporidiosis and the Immunocompromised Fact Sheet

Preventing Cryptosporidiosis in People who are Immunocompromised

Who is immunocompromised or has a weakened immune system?

Immunocompromised persons or people with weakened immune systems include those with HIV/AIDS, those with cancer or who have had a transplant and are taking certain immunosuppressive drugs, and those with inherited conditions that affect the immune system.

What is cryptosporidiosis?

Cryptosporidiosis is a diarrheal disease caused by a microscopic, single-celled parasite called *Cryptosporidium parvum* (also referred to as “Crypto”).

Do the precautions listed for persons with healthy immune systems apply to me?

Yes. See the VDH Cryptosporidiosis Fact Sheet for more information. If you are HIV positive, undergoing chemotherapy, taking drugs that suppress the immune system (e.g., corticosteroids) or are otherwise immunocompromised, you should take additional precautions to prevent cryptosporidiosis:

- Be extra careful about what you eat and drink. Wash vegetables and fruits that will be eaten raw and be careful not to let raw foods contaminate other foods.
- Be especially careful about hand washing, especially after using the toilet, changing diapers, before eating or preparing food, and after touching animals or working with soil.
- Avoid swallowing water from lakes, rivers, or swimming pools.
- Follow safer-sex guidelines.
- Take extra care when travelling, especially to developing countries where food and water may be contaminated with *Cryptosporidium* or other pathogens.

What about my drinking water?

If you obtain drinking water from a public water system that is properly operated, no additional precautions are recommended. You may want to discuss the need for protective measures with your healthcare provider because:

- Drinking water that is considered safe for persons with healthy immune systems may contain some *Cryptosporidium* oocysts (the egg-like form of the organism).
- No one knows whether a few oocysts could create a risk for someone who is immunocompromised.
- *Cryptosporidium* oocysts ingested while you are healthy may remain in your body until your immune system is severely depressed and then cause serious illness.

What are some options for safer beverages?

Bring tap water to a full boil for one minute before using.

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- This will kill all organisms including *Cryptosporidium*.
- To avoid burning yourself, allow water to cool before pouring into clean, dry containers.
- Taste can be improved by adding lemon or other flavorings.
- Use the boiled water for ice cubes, tooth brushing and mixing with concentrates. You do not need to use boiled water for food that will be cooked before eating.
- Dishes, silverware, and pots may be washed with tap water as long as they are dry before being used.

Use a point-of-use (personal-use, end-of-tap, or under sink) filter that will remove particles 1 micron or less in diameter. Filters in this category include:

- Those that use reverse osmosis
- Those labeled as “Absolute 1 micron” filters
- Those labeled as meeting NSF (National Sanitation Foundation) Standard #53 or Standard #58 for “Cyst Removal or Reduction”. (Note: The “Nominal” 1 micron filter rating is not standardized and these filters may not remove *Cryptosporidium* oocysts.)
- Follow directions for filter use and replace the filters according to manufacturer’s directions.
- Wear disposable gloves when changing filter cartridges. More information on filters is available at http://www.cdc.gov/parasites/crypto/gen_info/filters.html.

Use commercially-bottled beverages if they have been processed in a way that will remove *Cryptosporidium* oocysts.

- Bottled water does not have to meet the same standards as water coming from a treatment plant.
- Bottled water that has been distilled or passed through filters that remove particles 1 micron or less in size or that has undergone reverse osmosis prior to bottling will not have *Cryptosporidium* oocysts.
- Commercially bottled soft drinks and seltzers are generally safe.
- Bottled juices are safe if they have been pasteurized and do not require refrigeration before opening.
- Avoid fountain drinks, fruit drinks from frozen concentrate, iced tea made from untreated water and fresh apple cider.

How can I get more information about cryptosporidiosis?

- If you have concerns about cryptosporidiosis, contact your healthcare provider.
- Call your local health department. A directory of local health departments is located at <http://www.vdh.virginia.gov/local-health-districts/>
- Visit the Centers for Disease Control and Prevention website at <http://www.cdc.gov/parasites/crypto/ic/index.html>.

Additional information from the CDC for healthcare providers who care for immunocompromised patients can be found here: <http://www.cdc.gov/parasites/crypto/ic/hcp.html> or http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5804a1.htm?s_cid=rr5804a1_e.